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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/787,520

02/26/2004

Kent F. Hayes JR.

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EXAMINER

KEEHN, RICHARD G

ART UNIT

PAPER NUMBER

2152

MAIL DATE

DELIVERY MODE

05/23/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/787,520	Applicant(s) HAYES, KENT F.	
	Examiner Richard G. Keehn	Art Unit 2152	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 March 2008 and 28 April 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is in response to the amendment filed 3/12/2008 and interview summary filed 4/28/2008. Claims 1-32 are pending.
2. The text of those sections of Title 35, U.S. Code 102 (b) and 103(a) not included in this action can be found in a prior Office Action.

Response to Arguments

3. Applicant's amendments and arguments, see page 11 of 14, filed 3/12/2008, with respect to 35 U.S.C. 101 have been fully considered and are persuasive. The rejection of Claims 25-32 with respect to 35 U.S.C 101 have been withdrawn.
4. Applicant's amendments and arguments filed 3/12/2008 with respect to 35 U.S.C. 102(b) and 103(a) have been fully considered but they are not persuasive. Amended claims are discussed below.
5. Applicant's interview summary dated 4/28/2008 recites "The Examiner agreed with Applicants' representatives that claims 1, 10, 16 and 25 have elements that are not included in the cited references." Examiner respectfully disagrees. Examiner stated during the interview that he believed the cited art may disclose the amended limitations and that he would have to go back and search further into the references. Examiner wrote "Further search and reconsideration are required" on the Examiner's interview summary dated 3/28/2008. "Further search" referred to search within the cited art, then if not found, search for additional prior art. Examiner did not concede during the

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interview, nor on the interview summary, that the cited prior art do not disclose the amended features.

6. Claims 1-3, 5, 7-9, 16-18, 20, 22-23, 25-27, 29, and 31-32 are rejected under 35 U.S.C. 102(b) as being taught by US 2003/0023661 A1 (Clohessy et al.).

7. Claims 4, 19 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 2003/0023661 A1 (Clohessy et al.) as applied to claims 3, 18 and 27 above, and further in view of US 2003/0131226 A1 (Spencer et al.).

8. Claims 6, 10-11, 13-15, 21 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 2003/0023661 A1 (Clohessy et al.) as applied to claims 1, 10, 16 and 25, and further in view of US 6,697,849 B1 (Carlson).

9. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of US 2003/0023661 A1 (Clohessy et al.) and US 6,697,849 B1 (Carlson) as applied to claim 11 above, and further in view of US 2003/0131226 A1 (Spencer et al.).

10. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 2003/0023661 A1 (Clohessy et al.) as applied to claim 16 above, and further in view of US 2005/0004974 A1 (Sharma et al.).

11. Clohessy et al., Spencer et al., Carlson and Sharma et al. were cited as prior art in the previous office action. The teachings of the non-amended claims are respectfully maintained and incorporated by reference as set forth in the previous office action.

Examination of the amended claims follows.

Claim Rejections - 35 USC § 102

As to Claim 1, Clohessy et al. teach a computer-implemented method for resolving prerequisites for client devices in an Open Service Gateway Initiative (OSGi) framework, comprising:

determining, on a server, prerequisites for an OSGi bundle to be loaded on a client device (Clohessy et al., Page 4, paragraph 0139 recites determining by the server, the runtime resources needed on, and to be loaded on the client device. Paragraph 0038 recites the use of OSGi bundles), **the prerequisites including a set of all OSGi bundles that are necessary for utilizing the OSGi bundle (Clohessy et al. – Page 4, paragraph 0039, Page 3, paragraph 0035 and Fig. 4, element 102 recite the RDL which contains identification of OSGi runtime resources required for running the application component);**

communicating **a list of (Clohessy et al. – Page 1, paragraph 0009 recites the resource description list RDL, a list of runtime prerequisites)** the prerequisites from the server to the client device (Clohessy et al. – Page 5, paragraph 0046 recites the prerequisite application component being loaded from the server to the client device);

receiving a response from the client device, wherein the response identifies any resource limitations of the client device **determined by the client device (Clohessy et al. – Page 4, paragraph 0036 recites the client device's component manager determining runtime resource requirements based on the application prerequisites prior to loading into the portable device by comparing the maximum**

resources the application may need against the resources available on the client device, thus determining RDL components required) based on a comparison of the list of (Clohessy et al. – Page 4, paragraph 0036 recites the client device's component manager determining runtime resource requirements based on the application prerequisites prior to loading into the portable device by comparing the maximum resources the application may need against the resources available on the client device, thus determining RDL components required) the prerequisites (Clohessy et al., Page 4, paragraph 0041 recites the client device determining its available resources, and these are communicated to the server since, in paragraph 0042, the server uses this information to determine if the client has sufficient resources before downloading an application component. By identifying the available resources on the client, any limitation is also disclosed) **and the current resources of the client device (Clohessy et al. – Page 4, paragraph 0036 recites the client device's component manager determining runtime resource requirements based on the application prerequisites prior to loading into the portable device by comparing the maximum resources the application may need against the resources available on the client device, thus determining RDL components required);** and

resolving the prerequisites by identifying a final set OSGi bundles on the server that fulfills the prerequisites within the resource limitations of the client device (Clohessy et al., Page 4, paragraph 0043 recites that the bundles needed are identified, and not sent until the client has sufficient resources available).

As to Claim 16, Clohessy et al. teach a computerized system for resolving prerequisites for clients devices in an Open Service Gateway Initiative (OSGi) framework, comprising:

a prerequisite computation system for determining, on a server, prerequisites for an OSGi bundle to be loaded on a client device (Clohessy et al., Page 4, paragraph 0139 recites determining by the server, the runtime resources needed on, and to be loaded on the client device. Paragraph 0038 recites the use of OSGi bundles), **the prerequisites including a set of all OSGi bundles that are necessary for utilizing the OSGi bundle (Clohessy et al. – Page 4, paragraph 0039, Page 3, paragraph 0035 and Fig. 4, element 102 recite the RDL which contains identification of OSGi runtime resources required for running the application component);**

a communication system for communicating **a list of (Clohessy et al. – Page 1, paragraph 0009 recites the resource description list RDL, a list of runtime prerequisites)** the prerequisites from the server to the client device (Clohessy et al. – Page 5, paragraph 0046 recites the prerequisite application component being loaded from the server to the client device), and

for receiving a response from the client device, wherein the response identifies any resource limitations of the client device **determined by the client device (Clohessy et al. – Page 4, paragraph 0036 recites the client device's component manager determining runtime resource requirements based on the application prerequisites prior to loading into the portable device by comparing the maximum resources the application may need against the resources available on the client**

device, thus determining RDL components required) based on a comparison of the list of (Clohessy et al. – Page 4, paragraph 0036 recites the client device's component manager determining runtime resource requirements based on the application prerequisites prior to loading into the portable device by comparing the maximum resources the application may need against the resources available on the client device, thus determining RDL components required) the prerequisites (Clohessy et al., Page 4, paragraph 0041 recites the client device determining its available resources, and these are communicated to the server since, in paragraph 0042, the server uses this information to determine if the client has sufficient resources before downloading an application component. By identifying the available resources on the client, any limitation is also disclosed) and the current resources of the client device (Clohessy et al. – Page 4, paragraph 0036 recites the client device's component manager determining runtime resource requirements based on the application prerequisites prior to loading into the portable device by comparing the maximum resources the application may need against the resources available on the client device, thus determining RDL components required); and

a prerequisite resolution system for resolving the prerequisites by identifying a final set of OSGi bundles on the server that fulfills the prerequisites within the resource limitations of the client device (Clohessy et al., Page 4, paragraph 0043 recites that the bundles needed are identified, and not sent until the client has sufficient resources available).

As to Claim 25, Clohessy et al. teach a program product stored on a recordable medium **and executed by a computer (Clohessy et al. – Page 4, paragraph 0139 recites the server)** for resolving prerequisites for clients devices in an Open Service Gateway Initiative (OSGi) framework, comprising:

program code for determining, on a server, prerequisites for an OSGi bundle to be loaded on a client device (Clohessy et al., Page 4, paragraph 0139 recites determining by the server, the runtime resources needed on, and to be loaded on the client device. Paragraph 0038 recites the use of OSGi bundles), **the prerequisites including a set of all OSGi bundles that are necessary for utilizing the OSGi bundle (Clohessy et al. – Page 4, paragraph 0039, Page 3, paragraph 0035 and Fig. 4, element 102 recite the RDL which contains identification of OSGi runtime resources required for running the application component);**

program code for communicating **a list of (Clohessy et al. – Page 1, paragraph 0009 recites the resource description list RDL, a list of runtime prerequisites)** the prerequisites from the server to the client device (Clohessy et al. – Page 5, paragraph 0046 recites the prerequisite application component being loaded from the server to the client device), and

for receiving a response from the client device, wherein the response identifies any resource limitations of the client device **determined by the client device (Clohessy et al. – Page 4, paragraph 0036 recites the client device's component manager determining runtime resource requirements based on the application**

prerequisites prior to loading into the portable device by comparing the maximum resources the application may need against the resources available on the client device, thus determining RDL components required) based on a comparison of the list of (Clohessy et al. – Page 4, paragraph 0036 recites the client device's component manager determining runtime resource requirements based on the application prerequisites prior to loading into the portable device by comparing the maximum resources the application may need against the resources available on the client device, thus determining RDL components required) the prerequisites (Clohessy et al., Page 4, paragraph 0041 recites the client device determining its available resources, and these are communicated to the server since, in paragraph 0042, the server uses this information to determine if the client has sufficient resources before downloading an application component. By identifying the available resources on the client, any limitation is also disclosed), **and the current resources of the client device (Clohessy et al. – Page 4, paragraph 0036 recites the client device's component manager determining runtime resource requirements based on the application prerequisites prior to loading into the portable device by comparing the maximum resources the application may need against the resources available on the client device, thus determining RDL components required);** and

program code for resolving the prerequisites by identifying a final set of OSGi bundles on the server that fulfills the prerequisites within the resource limitations of the client device (Clohessy et al., Page 4, paragraph 0043 recites that the bundles needed are identified, and not sent until the client has sufficient resources available).

Claim Rejections - 35 USC § 103

As to Claim 10, Clohessy et al. teach a computer-implemented method for recursively resolving prerequisites for client devices in an Open Service Gateway Initiative (OSGi) framework, comprising:

determining, on a server, prerequisites for an OSGi bundle to be loaded on a client device (Clohessy et al., Page 4, paragraph 0139 recites determining by the server, the runtime resources needed on, and to be loaded on the client device. Paragraph 0038 recites the use of OSGi bundles), **the prerequisites including a set of all OSGi bundles that are necessary for utilizing the OSGi bundle (Clohessy et al. – Page 4, paragraph 0039, Page 3, paragraph 0035 and Fig. 4, element 102 recite the RDL which contains identification of OSGi runtime resources required for running the application component);**

communicating **a list of (Clohessy et al. – Page 1, paragraph 0009 recites the resource description list RDL, a list of runtime prerequisites)** the prerequisites from the server to the client device (Clohessy et al. – Page 5, paragraph 0046 recites the prerequisite application component being loaded from the server to the client device);

receiving a response from the client device, wherein the response identifies any resource limitations of the client device **determined by the client device (Clohessy et al. – Page 4, paragraph 0036 recites the client device's component manager determining runtime resource requirements based on the application**

prerequisites prior to loading into the portable device by comparing the maximum resources the application may need against the resources available on the client device, thus determining RDL components required) based on a comparison of the list of (Clohessy et al. – Page 4, paragraph 0036 recites the client device's component manager determining runtime resource requirements based on the application prerequisites prior to loading into the portable device by comparing the maximum resources the application may need against the resources available on the client device, thus determining RDL components required) the prerequisites (Clohessy et al., Page 4, paragraph 0041 recites the client device determining its available resources, and these are communicated to the server since, in paragraph 0042, the server uses this information to determine if the client has sufficient resources before downloading an application component. By identifying the available resources on the client, any limitation is also disclosed), **and the current resources of the client device (Clohessy et al. – Page 4, paragraph 0036 recites the client device's component manager determining runtime resource requirements based on the application prerequisites prior to loading into the portable device by comparing the maximum resources the application may need against the resources available on the client device, thus determining RDL components required);**

information derived from the response (Clohessy et al. – Figure 1, step 106 recites the computation of comparison based on client response); and

resolving the prerequisites by recursively identifying a final set that fulfills the prerequisites within the resource limitations of the client device (Clohessy et al. – Figure

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4 shows the recursive path used to resolve prerequisites, 104-106-108-109-110-112-104-etc. until 114 or END; Clohessy et al., Page 4, paragraph 0043 recites that the bundles needed are identified, and not sent until the client has sufficient resources available).

Clohessy et al. do not teach, but Carlson teaches caching [*sic*] on the server (Carlson, Column 5, lines 18-21 recite caching responses on a server).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine caching on the server taught by Carlson, with the derivation of response information taught by Clohessy et al.

One of ordinary skill in the art at the time the invention was made would have been motivated to quickly appropriate subsequent requests and significantly enhance performance (Carlson, column 5, first paragraph).

Conclusion

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard G. Keehn whose telephone number is 571-270-5007. The examiner can normally be reached on Monday through Thursday, 8:30am - 7:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on 571-272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RGK

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/Jeffrey Pwu/
Supervisory Patent Examiner, Art Unit 2146